

Claims

What is claimed is:

1. ✓ A ready-to-use food product being suitable for storage, said product comprising:
a batter;
at least one leavening agent; and,
at least one oil;
wherein, said oil separates said batter and leavening agent while in storage, and
agitation causes said batter, leavening agent and oil to at least partially admix.
2. The product of Claim 1, wherein said batter is generally acidic.
3. The product of Claim 2, wherein said at least one leavening agent is generally alkaline.
4. The product of Claim 1, wherein said batter has a pH of below about 5.
5. The product of Claim 1, wherein said batter has a pH of about 4.
6. The product of Claim 1, wherein said batter has a pH of about 3.5.
7. The product of Claim 1, wherein (at least one) said at least one leavening agent is at least partially encapsulated.

092180-030101
FOE020-025T2560

15. The product of Claim 12, wherein, when in storage, said oil layer separates from
said batter.

16. The product of Claim 15, wherein, when in storage, at least a portion of said
leavening agent is immersed in said oil layer.

17. The product of Claim 1, wherein said batter comprises flour.

18. The product of Claim 17, wherein said batter further comprises sugar.

19. The product of Claim 18, wherein said batter further comprises eggs.

20. The product of Claim 19, wherein said batter comprises at least one milk solid.

21. The product of Claim 1, wherein said batter further comprises an edible,
fungistatic agent.

22. The product of Claim 21, wherein said fungistatic agent comprises sorbic acid.

23. The product of Claim 1, wherein said batter comprises at least one nutritional
supplement.

09221980-086T2650
FOE080-086T2650

24. The product of Claim 23, wherein said at least one nutritional supplement comprises at least one of: thiamin, riboflavin, niacin, iron and calcium.
25. The product of Claim 1, wherein said batter further comprises at least one textural agent.
26. The product of Claim 25, wherein said at least one textural agent is selected from the group consisting of: fats, emulsifiers and hydrocolloids.
27. The product of Claim 1, wherein said batter comprises one or more flavorings.
28. The product of Claim 1, wherein said batter further comprises one or more preservatives.
29. The product of Claim 28, wherein said one or more preservatives are selected from the group consisting of: sodium salts of propionic or sorbic acids, sodium diacetate, vinegar, monocalcium phosphate, and lactic acid.
30. The product of Claim 1, wherein said leavening agent comprises an encapsulated acidulant selected from the group consisting of: monocalcium phosphate, monocalcium phosphate anhydrous, sodium acid pyrophosphate, sodium aluminum pyrophosphate, dicalcium phosphate dihydrate, dicalcium phosphate, sodium aluminum sulfate, glucon-delta-lactone, potassium hydrogen tartrate.

31. The product of Claim 1, wherein said leavening agent comprises an encapsulated acidulant comprising a baking acid.

32. The product of Claim 1, wherein said oil forms droplets encompassing a portion of said leavening agent, and said droplets isolate said at least one leavening agent from said batter

33. The product of Claim 1, when said product is used to produce a baked food product, pancake, bread, brownie, muffin, cookie, donut, pastry, pie, or cake.

34. A method for preparing a storable culinary product, said method comprising:
adding an aqueous unleavened batter having an effective pH below about 5.5 to a container;
forming a layer of oil above the aqueous acidified batter in said container; and,
adding an edible alkaline leavening agent above said oil layer within said container, said leavening agent being encapsulated in a normally water-insoluble, edible material, and in a quantity sufficient to raise the batter upon cooking into a final cooked culinary product.

35. The method of Claim 34, wherein said alkaline leavening agent comprises sodium bicarbonate.

36. The method of Claim 34, wherein the edible material encapsulating said leavening agent comprises an edible fat, wax, or hydrogenated vegetable oil.

37. The method of Claim 34, wherein said edible material comprises a plastic hydrogenated shortening and a fat.

38. The method of Claim 34, further comprising adding an edible fungistatic agent to said batter.

39. The method of Claim 38, wherein the edible fungistatic agent comprises sorbic acid.

40. The method of Claim 34, wherein said pH of said batter is in a range of about 3.9 to about 5.5.

41. The method of Claim 34, wherein said batter comprises a mixture of flour, eggs, sugar and milk solids.

42. A method for preparing a storable culinary product, said method comprising:
forming an aqueous unleavened batter;
adding an edible acid to said batter so as to lower a pH of said batter to below about 5.5;
placing said batter in a container;

forming a layer of oil above the aqueous, acidified batter in said container; and,
adding an edible alkaline leavening agent to said oil layer;
wherein, said leavening agent is encapsulated in a normally water-insoluble edible material, and is in a quantity sufficient to raise the batter upon cooking into a final cooked culinary product.

43. The method of Claim 42, wherein said alkaline leavening agent comprises sodium bicarbonate.

44. The method of Claim 42, wherein the edible material encapsulating said leavening agent comprises an edible fat, wax or hydrogenated vegetable oil.

45. The method of Claim 42, wherein said edible material comprises a plastic hydrogenated shortening and a fat as the encapsulating material.

46. The method of Claim 42, further comprising adding an edible fungistatic agent to said batter.

47. The method of Claim 46, wherein the edible fungistatic agent comprises sorbic acid.

48. The method of Claim 42, wherein said pH of said batter is in a range of about 3.9 to about 5.5.

49. The method of Claim 42, wherein said batter comprises a mixture of flour, eggs, sugar and milk solids.

50. A method for preparing a storable culinary product, said method comprising:
forming an aqueous unleavened batter;
adding an edible acid to said batter so as to lower a pH of said batter to below about 5.5;
placing said batter in a container;
forming a layer of oil above the aqueous, acidified batter in said container; and
adding an edible alkaline leavening agent to said oil layer;
wherein, said alkaline leavening agent is micronized to a sufficiently small particle size so as to enable the leavening agent to remain substantially dispersed and suspended within the oil layer, and said alkaline leavening agent is in a quantity sufficient to raise the batter upon cooking into a final cooked culinary product.

51. The method of Claim 50, wherein said alkaline leavening agent comprises sodium bicarbonate.

52. The method of Claim 50, further comprising adding an edible fungistatic agent to said batter.

09921980.030304

53. The method of Claim 52, wherein the edible fungistatic agent comprises sorbic acid.

54. The method of Claim 50, wherein said pH of said batter is in a range of about 3.9 to about 5.5.

55. The method of Claim 50, wherein said batter comprises a mixture of flour, eggs, sugar and milk solids.

56. A method for preparing a storable culinary product, said method comprising:
forming an aqueous unleavened batter;
adding an edible acid to said batter so as to lower a pH of said batter to below about 5.5;
placing said batter in a container;
forming a layer of oil above the aqueous, acidified batter in said container, and
adding an encapsulated edible alkaline leavening agent and encapsulated acidulant each of a sufficiently small particle size to enable the leavening agent and encapsulated acidulant to remain substantially dispersed and suspended within the oil layer, to said oil layer;
wherein, said alkaline leavening agent is in a quantity sufficient to raise the batter upon cooking into a final cooked culinary product.

57. The method of Claim 56, wherein said alkaline leavening agent comprises sodium bicarbonate.

58. The method of Claim 56, wherein said encapsulated acidulant comprises a leavening acid selected from the group consisting of: monocalcium phosphate (MCP), monocalcium phosphate anhydrous (AMCP), sodium acid pyrophosphate (SAPP), sodium aluminum pyrophosphate (SALP), dicalcium phosphate dihydrate (DPD), dicalcium phosphate (DCP), sodium aluminum sulfate (SAS), glucon-delta-lactone (GDL), potassium hydrogen tartrate (cream of tartar) and baking acid.

59. The method of Claim 58, further comprising adding an edible fungistatic agent to said batter.

60. The method of Claim 59, wherein the edible fungistatic agent comprises sorbic acid.

61. The method of Claim 59 wherein said pH of said batter is in a range of about 3.9 to about 5.5.

62. The method of Claim 56, wherein said batter comprises a mixture of flour, eggs, sugar and milk solids.

63. A method for preparing a storable culinary product, said method comprising:

forming an aqueous unleavened batter,
adding an edible acid to said batter so as to lower a pH of said batter to below about 5.5;
placing said batter in a container;
forming a layer of oil above the aqueous, acidified batter in the container; and,
adding an encapsulated edible alkaline leavening agent and encapsulated acidulant above said oil layer in said container.

64. The method of Claim 63, wherein said alkaline leavening agent comprises sodium bicarbonate.

65. The method of Claim 63, wherein said encapsulated acidulant comprises at least one leavening acid selected from the group consisting essentially of: monocalcium phosphate (MCP), monocalcium phosphate anhydrous (AMCP), sodium acid pyrophosphate (SAPP), sodium aluminum pyrophosphate (SALP), dicalcium phosphate dihydrate (DPD), dicalcium phosphate (DCP), sodium aluminum sulfate (SAS), glucon-delta-lactone (GDL), potassium hydrogen tartrate (cream of tartar) and baking acid.

66. The method of Claim 65, further comprising adding at least one edible fungistatic agent to said batter.

67. The method of Claim 66, wherein said at least one edible fungistatic agent comprises sorbic acid.

68. The method of Claim 63, wherein said pH of said batter is in a range of about 3.9 to about 5.5.

69. The method of Claim 63, wherein said batter comprises a mixture of flour, eggs, sugar and milk solids.

70. The method of claim 69, wherein said encapsulated alkaline leavening agent is sized below about 250 microns.

71. A method for providing a food product, said method comprising:
providing a container;
placing an unleavened batter into said container;
placing at least one leavening agent into said container; and,
placing at least one oil into said container;
wherein, when at rest, said at least one oil forms at least one layer in said container effectively isolating said batter from said at least one leavening agent.

72. The method of Claim 71, wherein said batter is a generally acidic.

73. The method of Claim 71, wherein, when agitated, said at least one leavening agent oil and batter mix.

09921980-08672660

0921480-03512660

81. The product of Claim 80, wherein said at least partially encapsulated leavening agent is at least partially encapsulated with a fatty material.

82. The product of Claim 80, wherein said at least partially encapsulated leavening agent is at least partially encapsulated with an edible fat, wax, or hydrogenated vegetable oil.

83. The product of Claim 75, wherein said leavening agent comprises sodium bicarbonate.

84. The product of Claim 83, wherein said leavening agent is at least partially encapsulated using a plastic hydrogenated shortening and a fat.

85. The product of Claim 75, wherein said oil forms a layer substantially separating said batter and at least one leavening agent.

86. The product of Claim 85, wherein, in said first state, said oil layer is above at least a portion of said batter, and at least a portion of said at least one leavening agent is above said oil layer.

87. The product of Claim 85, wherein, in said first state, said oil layer is generally interposed between said batter and leavening agent.

88. The product of Claim 85, wherein, in said first state, said oil layer generally separates from said batter.

89. The product of Claim 85, wherein, in said first state, at least a portion of said leavening agent is immersed in said oil layer.

90. The product of Claim 75, wherein said leavening agent comprises an encapsulated acidulant selected from the group consisting of: monocalcium phosphate, monocalcium phosphate anhydrous, sodium acid pyrophosphate, sodium aluminum pyrophosphate, dicalcium phosphate dihydrate, dicalcium phosphate, sodium aluminum sulfate, glucon-delta-lactone, potassium hydrogen tartrate.

91. The product of Claim 75, wherein said leavening agent comprises an encapsulated acidulant comprising a baking acid.

92. The product of Claim 75, wherein said oil forms droplets each encompassing at least a portion of said leavening agent, and said droplets isolate said at least one leavening agent from said batter.

93. The product of claim 75, wherein said oil, leavening agent and batter in said second state, automatically transforms to said first state over time.

94. The method of Claim 75, wherein said food product is used to produce a baked food product, pancake, bread, brownie, muffin, cookie, donut, pastry, pie or cake.

FOIb0" 036T2660